

# PROJECT FACT SHEET

**CONTRACT TITLE:** Secondary Oil Recovery From Selected Carter Sandstone Oil Fields -- Class 1

**ID NUMBER:** DE-FC22-93BC14952

**CONTRACTOR:** Anderman/Smith Operating  
Company

**B & R CODE:** AC1010000

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**DOE PROGRAM MANAGER:**

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**DOE PROJECT MANAGER:**

**NAME:** Edith C. Allison

**LOCATION:** BPO

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**CONTRACT PERFORMANCE PERIOD:**

10/21/1992 to 07/05/1996

**PROJECT SITE**

**CITY:** Vernon

**STATE:** AL

**PROGRAM:** Field Demonstrations

**CITY:** Denver

**STATE:** CO

**RESEARCH AREA:** Class 1

**CITY:**

**STATE:**

FUNDING (1000'S)	DOE	CONTRACTOR	TOTAL
PRIOR FISCAL YRS	370	532	902
FISCAL YR 1996	0	0	0
FUTURE FUNDS	0	0	0
TOTAL EST'D FUNDS	370	532	902

**OBJECTIVE:** The project will initiate waterflooding of Carter sandstones at three sites in the Bluff and North Fairview fields in the Black Warrior Basin, Lamar County, Alabama, where the major production constraints are low bottomhole pressures and reservoir heterogeneity. The quantification of heterogeneities will use standard geological and production/reservoir studies and reservoir computer simulation. The project will develop a methodology for optimum application of geologic and engineering reservoir characterization technologies. Workshops, technical publications and presentations will transfer the project results to the industry.

**METRICS/PERFORMANCE:**

Products developed:

**PROJECT DESCRIPTION:**

**Background:** Three Carter sandstone reservoirs in the Black Warrior Basin, Lamar County, Alabama are at the end of their economic lives. Anderman/Smith Operating Company will conduct waterflood feasibility studies, operations, and performance analysis to optimize operations on two reservoirs to determine the viability of waterflooding the largest and most costly of the three sites. If viable, the third site will be waterflooded.

**Work to be performed:** The project will initiate secondary recovery at three sites in the Carter sandstones in Bluff and North Fairview fields in the Black Warrior Basin, Lamar County, Alabama, where the major production constraints are low bottomhole pressures and reservoir heterogeneity. The quantification of heterogeneities will be accomplished through the use of standard geological and production/reservoir data, and extensive reservoir computer simulation. The proposed waterflood will require the drilling of water source wells and three injectors/producers. Previous waterflooding of the Carter sandstone in adjacent fields has led to increased incremental production. Technology transfer will include workshops, technical publications and presentations. TPO: Gene Pauling

**PROJECT STATUS:**

**Current Work:** Water injection began at the North Fairview Unit on June 26, 1993. Water injection is anticipated to be 250 BWPD @ 0 psi initially and 125 BWPD @ 1200 psi after fill up. The Central Bluff Unit is currently injecting 200 BWPD @ 0 psi and has injected a total of 30,610 BW since January. Reservoir fill up (66,000 BW) is expected to occur later this year. No production response has been observed. Geologic and engineering studies on the South Bluff Unit have been delayed until this fall. Phase II of this project will not be pursued and a final report will be prepared.

**Scheduled Milestones:**

- |  |       |
|--|-------|
| 1. Complete the Central Bluff Unit Construction.   | 12/92 |
| 2. Start water injection at the Central Bluff Unit.                                      | 01/93 |
| 3. Complete the North Fairview Field reservoir engineering waterflood feasibility study. | 04/93 |
| 4. Complete the North Fairview Field Unitization.  | 05/93 |
| 5. Complete the North Fairview Unit Construction.  | 07/93 |
| 6. Start water injection at the North Fairview Unit.                                     | 06/93 |
| 7. Decision to proceed with the South Bluff Unit waterflood development                  | 09/93 |

**Accomplishments:** Water injection has begun and construction of the water injection facility is almost complete at the North Fairview Unit.